



IFW

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Alan R. Reinberg et al.

Prior Application Serial No.: 09/740,256

Prior Application Filed: December 19, 2000

Serial No.: 10/872,765

Filed: June 21, 2004

For: SMALL ELECTRODE FOR A  
CHALCOGENIDE SWITCHING  
DEVICE AND METHOD FOR  
FABRICATING SAME

§ Group Art Unit: Unassigned

§ Examiner: Unassigned

§ Atty Docket: MCRO:106--3/FLE  
95-0412.03

Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450

CERTIFICATE OF MAILING  
37 C.F.R. 1.8

I hereby certify that this correspondence is being deposited with the U.S. Postal Service with sufficient postage as First Class Mail in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date below:

December 7, 2004

Date

Michael G. Fletcher

Sir:

**INFORMATION DISCLOSURE STATEMENT  
PURSUANT TO 37 C.F.R. §§ 1.97(b)(1) AND 1.98**

In compliance with the duty of disclosure under 37 C.F.R. § 1.56(a), Applicants respectfully request that this Information Disclosure Statement be entered and that the listed references be considered by the Examiner and made of record. Under 37 C.F.R. § 1.98(e), copies of the listed domestic references are not required to be submitted to the Examiner. Therefore, only copies of the listed foreign references and other art are provided herewith.

In accordance with 37 C.F.R. § 1.97, this Information Disclosure Statement is not to be construed as a representation that a search has been made, as an admission that the information cited herein is, or is considered to be, material to patentability as defined in 37 C.F.R. § 1.56(b), or as a representation that no other possibly material information, as defined in 37 C.F.R. § 1.56(b), exists.

Furthermore, the references listed on the attached Form 1449 are not to be construed as an admission that these references qualify as prior art as to the above-referenced application or any related application. Rather, these references are being presented for the Examiner's consideration without prejudice to Applicants' right to demonstrate that any of these references do not qualify as prior art should the Examiner choose to apply any of these references.

The following information is listed below in accordance with 37 C.F.R. § 1.98. Any explanation of non-English language documents contained in this Information Disclosure Statement is believed to constitute a concise explanation of the relevance of the listed reference as it is presently understood by the individual designated in § 1.56(c) most knowledgeable about the content of the listed reference, in accordance with 37 C.F.R. § 1.98(a)(3):

Respectfully submitted,

Date: December 7, 2004

  
\_\_\_\_\_  
Michael G. Fletcher  
Reg. No. 32,777  
FLETCHER YODER  
P.O. Box 692289  
Houston, Texas 77269-2289  
(281) 970-4545

**Form PTO-1449** (modified)ATTY. DOCKET NO.  
MCRO:106--3/FLESERIAL NO.  
10/872,765

List of Patents and Publications

For Applicant's Information

Disclosure Statement

(Use several sheets if necessary)

**APPLICANT**

Alan R. Reinberg et al.

**FILING DATE**

June 21, 2004

**GROUP**

Unassigned

**U.S. PATENT DOCUMENTS**

EXAM. INIT.	REF. DES.	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE
		3,423,646	01/21/69	Cubert et al.	317	234	
		3,602,635	08/31/71	Romankiw	174	68.5	
		3,796,926	03/12/74	Cole et al.	317	234 R	
		3,877,049	04/08/75	Buckley	357	2	
		3,886,577	05/75	Buckley	257	3	
		4,099,260	07/04/78	Lynes et al.	365	105	
		4,115,872	09/19/78	Bluhm	365	163	
		4,174,521	11/13/79	Neale	357	45	
		4,194,283	03/25/80	Hoffmann	29	571	
		4,227,297	10/14/80	Angerstein	29	571	
		4,203,123	05/13/80	Shanks	357	2	
		4,272,562	06/09/81	Wood	427	87	
		4,433,342	02/21/84	Patel et al.	357	2	
		4,458,260	07/03/84	McIntyre et al.	357	30	
		4,499,557	02/12/85	Holmberg et al.	365	163	
		4,502,208	03/05/85	McPherson	29	584	
		4,502,914	03/05/85	Trumpp et al.	156	643	
		4,569,698	02/11/86	Feist	148	1.5	
		4,616,404	10/86	Wang et al.	257	577	
		4,630,355	12/23/86	Johnson	29	575	
		4,642,140	02/10/87	Noufi et al.	148	6.24	
		4,666,252	05/19/87	Yaniv et al.	350	333	
		4,677,742	07/07/87	Johnson	29	591	
		4,757,359	07/12/88	Chiao et al.	357	23.5	
		4,795,657	01/03/89	Formigoni et al.	427	96	
		4,804,490	02/14/89	Pryor et al.	252	62.3 BT	
		4,809,044	02/28/89	Pryor et al.	357	2	



EXAM. INIT.	REF. DES.	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE
		4,823,181	04/18/89	Mohsen et al.	357	51	
		4,876,220	10/24/89	Mohsen et al.	437	170	
		4,876,668	10/24/89	Thakoor et al.	365	163	
		4,881,114	11/14/89	Mohsen et al.	357	54	
		4,892,840	01/09/90	Esquivel et al.	437	52	
		5,144,404	09/01/92	Iranmanesh et al.	357	51	
		5,166,096	11/24/92	Cote et al.	437	195	
		5,166,758	11/24/92	Ovshinsky et al.	257	3	
		5,177,567	01/05/93	Klersy et al.	257	4	
		5,293,335	03/08/94	Pernisz et al.	365	148	
		5,296,716	03/22/94	Ovshinsky et al.	257	3	
		5,335,219	08/02/94	Ovshinsky et al.	369	288	
		5,341,328	08/23/94	Ovshinsky et al.	365	163	
		5,359,205	10/25/94	Ovshinsky	257	3	
		5,363,329	11/08/94	Troyan	365	184	
		5,414,271	05/09/95	Ovshinsky et al.	257	3	
		5,429,988	07/04/95	Huang et al.	437	187	
		5,510,629	04/23/96	Karpovich et al.	257	50	
		5,534,711	07/09/96	Ovshinsky et al.	257	3	
		5,534,712	07/09/96	Ovshinsky et al.	217	3	
		5,536,947	07/16/96	Klersy et al.	257	3	
		5,569,932	10/29/96	Shor et al.	257	3	
		5,578,185	11/26/96	Bergeron et al.	205	123	
		5,687,112	11/11/97	Ovshinsky	365	163	04/19/96
		5,714,768	02/03/98	Ovshinsky et al.	257	40	10/24/95
		5,714,795	02/03/98	Ohmi et al.	257	530	11/06/95
		5,751,012	05/12/98	Wolstenholme et al.	257	5	06/07/95
		5,789,277	08/04/98	Zahorik et al.	438	95	07/22/96
		5,789,758	08/04/98	Reinberg	257	3	06/07/95
		5,812,441	09/22/98	Manning	365	100	10/21/96
		5,814,527	09/29/98	Wolstenholme et al.	438	5	07/22/96
		5,831,276	11/03/98	Gonzalez et al.	257	3	07/22/96
		5,841,150	11/24/98	Gonzalez et al.	257	3	02/12/97

## FOREIGN PATENT DOCUMENTS

EXAM. INIT.	REF. DES.	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB CLASS	TRANSLATION YES/NO
		1 319 388	06/06/73	Great Britain	H01L	9/00	Yes
		0 117 045 A3	08/29/84	Europe	H01L	45/00	Yes
		JP 60109266	06/14/85	Japan	H01L	27/10	Yes - Abstract

## OTHER ART (Author, Title, Journal, Volume, Pertinent Pages, & Date)

		Kim and Kim, " Effects of High-Current Pulses on Polycrystalline Silicon Diode with n-type Region Heavily Doped with Both Boron and Phosphorus," <i>J. Appl. Phys.</i> , 53(7):5359-5360, 1982.
		Neale and Aseltine, " The Application of Amorphous Materials to Computer Memories," <i>IEEE</i> , 20(2):195-205, 1973.
		Pein and Plummer, " Performance of the 3-D Sidewall Flash EPROM Cell," <i>IEEE</i> , 11-14, 1993.
		Post and Ashburn, " Investigation of Boron Diffusion in Polysilicon and its Application to the Design of p-n-p Polysilicon Emitter Bipolar Transistors with Shallow Emitter Junctions," <i>IEEE</i> , 38(11):2442-2451, 1991.
		Post <i>et al.</i> , " Polysilicon Emitters for Bipolar Transistors: A Review and Re-Evaluation of Theory and Experiment," <i>IEEE</i> , 39(7):1717-1731, 1992.
		Post and Ashburn, " The Use of an Interface Anneal to Control the Base Current and Emitter Resistance of p-n-p Polysilicon Emitter Bipolar Transistors," <i>IEEE</i> , 13(8):408-410, 1992.
		Rose <i>et al.</i> , " Amorphous Silicon Analogue Memory Devices," <i>J. Non-Crystalline Solids</i> , 115:168-170, 1989.
		Schaber <i>et al.</i> , " Laser Annealing Study of the Grain Size Effect in Polycrystalline Silicon Schottky Diodes," <i>J. Appl. Phys.</i> , 53(12):8827-8834, 1982.
		Yamamoto <i>et al.</i> , " The I-V Characteristics of Polycrystalline Silicon Diodes and the Energy Distribution of Traps in Grain Boundaries," <i>Electronics and Communications in Japan</i> , Part 2, 75(7):51-58, 1992.
		Yeh <i>et al.</i> , " Investigation of Thermal Coefficient for Polycrystalline Silicon Thermal Sensor Diode," <i>Jpn. J. Appl. Phys.</i> , 31(Part 1, No. 2A):151-155, 1992.
		Oakley <i>et al.</i> , " Pillars - The Way to Two Micron Pitch Multilevel Metallisation," <i>IEEE</i> , 23-29, 1984.
		Prince, " Semiconductor Memories," A Handbook of Design, Manufacture, and Application, 2 <sup>nd</sup> Ed., pgs. 118-123.

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.